Amendments to the Specification:

Please replace paragraph [0005] with the following amended paragraph:

[0005] In order to solve the above-mentioned problem, an LED with a transparent conductive oxide layer formed on a p-type contact layer having high carrier concentration has been disclosed in U.S. NO. 6,078,064. Because the transparent conductive oxide layer has high transmittance, the transparent conductive oxide layer can be thicker to better spread current in the transparent conductive oxide layer. Therefore, brightness of the LED can be increased by improving light-emitting characteristic of the LED. However, the carrier concentration of the p-type contact layer needs to be greater than 5*1018 cm-3 to form a good ohmic contact upon the transparent conductive oxide layer. With regard to the ~~prior art~~ conventional semiconductor process, the p-type contact layer having high carrier concentration, however, is not easy to manufacture. It is well-known that the p-doped layer generally contains more defects, and the hydrogen atoms will affect formation of the p-doped layer. The carriers with high concentration are not easy to obtain even if a large amount of p-type dopants are implanted. Though this art can effectively increase light intensity of the light emitted from the LED, contact resistance between the p-type contact layer and the transparent conductive oxide layer is so high that the forward bias voltage of the LED can adversely affect electric characteristics of the LED.

Please replace paragraph [0010] with the following amended paragraph:

[0010] It is an advantage of the present invention that a dual dopant contact layer is positioned between a transparent conductive oxide layer and the stacked semiconductor layers of the ~~claimed~~ novel LED. With the p-type impurity ~~carriers~~ and the n-type impurity ~~carriers~~ coexist in the dual dopant layer, the resistance associated with the ohmic contact between the transparent conductive oxide layer and the stacked semiconductor layers of the LED is reduced. The dual dopant layer has a p-type impurity ~~carriers~~ and an n-type impurity ~~carriers~~, as well as a corresponding p-type impurity energy level and a corresponding n-type impurity energy level coexist in the

energy bandgap of the dual dopant contact layer. When the LED is powered by a normal operating forward bias, the energy band of the dual dopant contact layer is strongly bended. The ~~and~~ conductive carriers are transmitted between the transparent conductive oxide layer and p-type contact ~~cladding~~ layer through the coexist p-type and n-type impurity energy levels for forming a good ohmic contact when the ~~claimed~~ novel LED is powered by a forward bias voltage. To sum up, the ~~claimed~~ novel LED is capable of greatly increasing intensity of the emitted light without seriously making the forward bias voltage raised.

Please replace paragraph [0015] with the following amended paragraph:

[0015] The dual dopant contact layer 24 is doped by a p-type ~~impurities~~ impurity and an n-type ~~impurities~~ impurity simultaneously ~~to form both p-type carriers and n-type carriers within the dual dopant contact layer 24~~. In the preferred embodiment, the concentration of the ~~dopant~~ impurities is equal to $1*10^{19}$ cm^{-3}, and the thickness of the dual dopant contact layer 24 roughly equals 60 angstroms. As the experimental result shown in the following Table 1, the preferred embodiment has a forward bias voltage greater than a forward bias voltage required by a ~~prior art~~ conventional LED utilizing a Ni/Au metallic layer, and the forward bias voltage is raised from 3.15V to 3.16V. Please note that the forward bias voltage is measured when 20mA current passes through the ~~claimed~~ novel LED 10 and the ~~prior art~~ conventional LED. As shown in Table 1, the preferred embodiment has light intensity greater than light intensity outputted by the ~~prior art~~ conventional LED utilizing the Ni/Au metallic layer, and the light intensity is raised from 25.7mcd to 34.5mcd. That is, the light intensity is improved by 34.2%. In addition, the ~~prior art~~ conventional LED with an n+ reverse tunneling contact layer is tested, and the result is shown in Table 1. It is obvious that the ~~prior art~~ conventional LED with the n+ reverse tunneling contact layer is capable of increasing the light intensity, but the required forward bias voltage is accordingly increased. Therefore, the LED 10 according to the present invention can improve the light intensity without greatly increasing the exerted forward bias voltage. Compared with the ~~prior art~~ conventional LED, the LED 10 according to the present invention apparently has better performance.

Please replace Table 1 with the following amended table:

Table 1

	Vf(V)@20mA	Intensity(mcd)
Ni/Au metallic layer	3.15	25.7
n+ reverse tunneling contact layer	3.41	36.3
~~claimed~~ novel LED	3.16	34.5

Please replace paragraph [0016] with the following amended paragraph:

[0016] Please note that the formation of the dual dopant contact layer 24 is not limited by the above-mentioned manufacturing method. Taking another LED emitting light with a wavelength equaling 526nm for example, this LED has the same structure shown in FIG. 1, but the dual dopant contact layer 24 for this LED is manufactured by another process. After the p-type contact layer 22 is fabricated, an n-type InGaN contact layer with a thickness equaling 20 angstroms is then stacked on the p-type contact layer 22. After the n-type InGaN contact layer successfully grows on the p-type contact layer 22, an annealing process with a cooling rate less than 40℃/min is applied to make the n-type ~~dopant~~ impurity within the n-type InGaN contact layer and the p-type ~~dopants~~ impurity within the p-type contact layer 22 diffuse to each other. Then, the original n-type InGaN contact layer contains both the n-type ~~dopants~~ impurity and the p-type ~~dopants~~ impurity, and the InGaN contact layer becomes a dual dopant contact layer. The dual dopant contact layer then has the concentration of n-type impurity ~~carriers~~ equaling $8*10^{18}$ cm^{-3}, and has the concentration of p-type impurity ~~carriers~~ equaling $5*10^{18}$ cm^{-3}. The experimental result associated with the above LED is shown in Table 2.

Please replace Table 2 with the following amended table:

Table 2

	Vf(V)@20mA	Intensity(mcd)
Ni/Au metallic layer	3.11	137.6
N+ reverse tunneling contact layer	3.56	171.6
~~claimed~~ novel LED	3.20	178.4

Please replace paragraph [0017] with the following amended paragraph:

[0017] Compared to the ~~prior-art~~ conventional LED with the Ni/Au metallic layer, the ~~claimed~~ novel LED raises the light intensity from 137.6mcd to 178.4mcd. That is, the light intensity is then improved by 29.8%. Similarly, the ~~prior-art~~ conventional LED with the n+ reverse tunneling contact layer is tested, and the result is also shown in Table 2. It is obvious that the ~~prior-art~~ conventional LED with the n+ reverse tunneling contact layer is capable of increasing the light intensity, but the required forward bias voltage is accordingly increased to be 3.56V that is greatly higher than the forward bias voltage (3.11V) required by the ~~prior-art~~ conventional LED with the Ni/Au metallic layer. However, the forward bias voltage measured for the ~~claimed~~ novel LED is merely raised from 3.11V to 3.20V. Therefore, the LED of to the present invention can improve the light intensity without greatly increasing the exerted forward bias voltage. Compared with the ~~prior-art~~ conventional LED, the LED of to the present invention apparently performs better.

Please replace paragraph [0019] with the following amended paragraph:

[0019] The n-type conductive substrate 42 is made of one material selected from a material group consisting of GaN, SiC, Si, AlN, ZnO, MgO, GaP, GaAs, and Ge. The

above-mentioned insulating substrate 12 is made of one semiconductor material selected from a material group consisting of sapphire, $LiGaO_2$, and $LiAlO_2$. The above-mentioned buffer layer 14 is made of AlInGaN-based material or II-nitride-based material. The above-mentioned p-type contact layer 16 comprises $Al_{x1}In_{y1}Ga_{1-(x1+y1)}N$ ($0 \leqq x1 \leqq 1$; $0 \leqq y1 \leqq 1$; and $0 \leqq x1+y1 \leqq 1$). The above-mentioned n-type cladding layer 17 comprises AlxGa1-xN, and $0 \leqq x \leqq 1$.The above-mentioned multiple quantum well light emitting layer 18 comprises r InGaN quantum wells and (r+1) InGaN barriers so that both sides of each InGaN quantum well is sandwiched in between two InGaN barriers. Please note that r is not less than 1, each InGaN quantum well is formed by $In_eGa_{1-e}N$, and each InGaN barrier is formed by $In_fGa_{1-f}N$ ($0 \leqq f < e \leqq 1$). The above-mentioned p-type cladding layer 20 comprises ~~$Al_xGa_{1-x}N$, wherein $0 \leqq x \leqq 1$~~ $Al_yGa_{1-y}N$, wherein $0 \leqq y \leqq 1$. The above-mentioned p-type contact layer 22 being made of $Al_{x2}In_{y2}Ga_{1-(x2+y2)}N$ ($0 \leqq x2 \leqq 1$; $0 \leqq y2 \leqq 1$; and $0 \leqq x2+y2 \leqq 1$). The above-mentioned transparent conductive oxide layer 26 is made of one semiconductor material selected from a material group consisting of Indium-tin oxide (ITO), Cadmium-tin oxide, Antimony-tin oxide (ATO), Zinc oxide (ZnO), and Zinc-tin oxide. The above-mentioned dual dopant contact layer 24 is made of GaN-based material. The above-mentioned n-type dopant is made of one material selected from a material group consisting of Si, Ge, Sn, Te, O, S, and C, and the p-type ~~dopand~~ dopant is made of one material selected from a material group consisting of Mg, Zn, Be, and Ca.

Please replace paragraph [0020] with the following amended paragraph:

[0020] In contrast to the ~~prior art~~ conventional LED, the ~~claimed~~ novel LED positions a dual dopant layer between a transparent conductive oxide layer and the light emitting stacked structure. With the p-type ~~carriers~~ impurity and the n-type ~~carriers~~ impurity coexistent in the dual dopant layer, the resistance associated with the ohmic contact between the transparent conductive oxide layer and the light emitting stacked structure is reduced. Therefore, the ~~claimed~~ novel LED is capable of solving the problem in the ~~prior art~~ conventional LED. Because the dual dopant layer has p-type ~~carriers~~ impurity and n-type impurity ~~carriers~~, an energy level associated with the

n-type ~~carriers~~ impurity and an energy level associated with the p-type ~~carriers~~ impurity coexist ~~are located~~ within the energy band gap of the dual dopant layer. Therefore, when the ~~claimed~~ novel LED is powered by a forward bias voltage, carriers are conductive through both coexisted impurity energy levels. Hence ~~Therefore~~, conductive carriers are transmitted between the transparent conductive oxide layer and p-type cladding layer for forming a good ohmic contact between the transparent conductive oxide layer and the stacked semiconductor layers of the LED. With this transmission mechanism, it is unnecessary to fabricate a ~~prior art~~ conventional LED of a ~~highly-doped~~ p-type contact layer with a p-type carrier concentration, as well as a high conductivity. Therefore, the problem related to forming ~~the prior art~~ the high ~~highly~~ carrier concentration ~~doped~~ p-type contact layer of the conventional LED is solved by the ~~claimed~~ novel LED. In addition, the ~~claimed~~ novel LED is capable of greatly increasing intensity of the emitted light without seriously raising forward bias voltage. To sum up, the overall performance of the ~~claimed~~ novel LED is better than the performance of the conventional ~~prior art~~ LED.